

REMARKS

Claims 11, 12 and 81-91 are pending with claims 11, 12 and 81 being independent. Claims 1-10 and 13-80 have been canceled, claims 11, 12, 82 and 83 have been amended, and dependent claims 85-91 have been added. Claims 11 and 12 have been amended to recite "current source circuits" instead of "current sources," as recited in claim 81, and claims 82 and 83 have been amended for consistency with claim 81. In addition, claim 12 has been amended to recite that the changing over circuit is electrically connected to a particular pair of current source circuits through the second switch, as shown in Fig. 9 of the application. New claims 85-91 find support in the application at Figs. 3 and 4 and paragraph [0063] (claims 85, 87 and 90) and Fig. 9 and paragraph [0130] (claims 86, 88, 89 and 91). No new matter has been introduced.

Initially, applicants thank the Examiner for the interview granted to the undersigned on December 4, 2007. The remarks below reflect the substance of the interview.

Claims 11, 12 and 81 have been rejected as being anticipated by Koyama (U.S. Patent Publication No. 2001-0048408).

Claim 11

Claim 11 recites a signal line driver circuit that includes a shift register and a latch circuit electrically connected to the shift register. The latch circuit includes pairs of current source circuits, with each pair of current source circuits being configured to receive a set signal (output by the shift register) and a signal current, and to control an output current value depending on a value of the signal current. A changing over circuit is electrically connected to signal lines and to the pairs of current source circuits, and is configured to select one pair of current source circuits from the pairs of current source circuits to be electrically connected to each of the signal lines.

With respect to claim 11, applicant requests reconsideration and withdrawal of the rejection because Koyama does not describe or suggest pairs of current source circuits such as are recited in claim 11. In particular, Koyama does not describe or suggest that a pair "of current

source circuits is configured to receive a set signal and a signal current, and to control an output current value depending on a value of the signal current.”

The rejection points to Fig. 5B of Koyama and, in particular, the pair of transistors that receive “CONTROL SIGNAL 1” and “CONTROL SIGNAL 2,” as corresponding to a pair of current sources. However, each of these transistors cannot be said to be a current source circuit. Rather, these transistors merely serve to either connect the “INPUT” voltage with the input to the latch produced by the two inverters, or to isolate the “INPUT” voltage from the input to the latch.

Accordingly, for at least this reason, the rejection of claim 11 should be withdrawn.

Claim 12

Similarly to claim 11, independent claim 12 recites a signal line driver circuit that includes a shift register, a latch circuit, and a changing over circuit, and is allowable over Koyama for the reasons discussed above with respect to claim 11.

However, unlike claim 11, claim 12 further recites a first switch provided between the shift register and each of the pairs of current source circuits, and a second switch through which the changing over circuit is electrically connected to a particular pair of current source circuits. Koyama does not describe or suggest either of these switches.

The rejection indicates that the pairs of current sources and the first switch are shown in Fig. 5B of Koyama. However, in order for this to be the case, the first switch, which needs to be between the shift register and the pairs of current sources, would need to be the pair of transistors that receive “CONTROL SIGNAL 1” and “CONTROL SIGNAL 2,” in which case the two inverters that make up the latch would need to be the pairs of current sources. However, claim 12 further requires the current sources to receive a set signal from the shift register and a signal current, and the only signal received by the inverters is the output of the two transistors. Accordingly, the inverters cannot be the pairs of current sources and Fig. 5B does not describe or suggest both the first switch and the pairs of current sources. Accordingly, for at least this additional reason, the rejection of claim 12 should be withdrawn.

Nor does Koyama describe or suggest a second switch through which the changing over circuit is electrically connected to a particular pair of current source circuits. The rejection indicates that the second switch is provided by an analog switch 20 of Fig. 6. However, while an analog switch 20 provides an output to a signal line selecting circuit 10c, which the rejection equates with the changing over circuit, the analog switch 20 is isolated from the latch circuit portion by the bit comparison pulse-width converter circuit (BPC), such that the analog switch cannot connect the signal line selecting circuit 10c with a pair of current source circuits of the latch circuit. Accordingly, for at least this additional reason, the rejection of claim 12 should be withdrawn.

Claim 81

Similarly to claim 11, claim 81 recites a plurality of current source circuits configured to be supplied with a first current and to supply a second current, where a value of the second current depends on a value of the first current. As discussed above with respect to claim 11, Koyama does not describe or suggest such current source circuits. Accordingly, for at least this reason, the rejection of claim 11 should be withdrawn.

Claims 82-84

Claims 82-84 have been rejected as being unpatentable over Koyama in view of Akimoto (U.S. Patent No. 6,850,216). Applicant requests reconsideration and withdrawal of this rejection because Akimoto does not remedy the failure of Koyama to describe or suggest the subject matter of the independent claims.

Claims 85-91

Each of claims 85, 87 and 90 recites that each of the current source circuits includes at least one capacitor and at least one transistor, and operates in a set mode or an output mode depending on a value of the set signal received by the current source circuit. Each of these claims further recites that, in the set mode, the capacitor is charged to a potential depending on

the value of the signal current, and, in the output mode, the output current value depends on the potential to which the capacitor is charged. Applicant submits that claims 85, 87 and 90 are allowable for the additional reason that neither Koyama, Akimoto, nor any proper combination of the two describes or suggests a current source circuit configured and operating in this manner.

Each of claims 86, 88 and 91 recites that, when a first current source circuit of a pair of current source circuits is operating in the set mode, a second current source circuit of the pair of current source circuits is operating in the output mode; and, when the second current source circuit of the pair of current source circuits is operating in the set mode, the second current source circuit of the pair of current source circuits is operating in the output mode. Applicant submits that claims 86, 88 and 91 are allowable for the additional reason that neither Koyama, Akimoto, nor any proper combination of the two describes or suggests pairs of current source circuits configured and operating in this manner.

Claim 89 depends from claim 12 and recites a third switch connected between a pair of current source circuits and the signal current. Claim 89 further recites that the second and third switches are controlled such that, when the second switch is configured to select a first current source circuit of the pair of current source circuits, the third switch is configured to select a second current source circuit of the pair of current source circuits, and, when the second switch is configured to select the second current source circuit of the pair of current source circuits, the third switch is configured to select the first current source circuit of the pair of current source circuits. Applicant submits that claim 89 is allowable for the additional reason that neither Koyama, Akimoto, nor any proper combination of the two describes or suggests second and third switches configured and operating in this manner.

Applicant submits that all claims are in condition for allowance.

The fee in the amount of \$460 in payment of the two-month extension fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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